

symptoms of carpal tunnel syndrome, made of acroparesthesia intermittent lasting for one year, causing the patient to stop its operations manual. Clinical examination found a mass of the forearm, mobile, painless, hypoesthesia in the territory of the median nerve and provocation tests positive without associated muscle atrophy.

The electromyography showed a reduction in conduction velocities of motor and sensory median nerve at the carpal tunnel and forearm. Plain radiographs of the forearm has objectified the soft tissue calcifications. The scanner has objectified a tissue-like mass at the expense of the superficial flexor, surgical biopsy showed an intramuscular hemangioma of cavernous type.

During surgical excision, exploration has found a tumor depends on the superficial flexor of fingers extending to the carpal tunnel with an invasion of the perineurium of the median nerve.

The postoperative course was uneventful, the postoperative rehabilitation led to the fight against pain and cutaneous trophic disorders, the surgical scar to soften and strengthen the finger flexors. After falling two years, the patient is asymptomatic and hand function was excellent.

Discussion.— The CTS is the most widespread of syndromes canal, the diagnosis can be easily performed by most clinicians. It is often idiopathic in relation to anatomical abnormalities. The etiology is common intracanal tumors. A tumors etiology extracanal with intracanal invasion to clinical expression as a dominant carpal tunnel syndrome is rarely. The median nerve damage is by invasion intraneural, perineural or by compression.

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P008-e

Radial shock wave therapy in the treatment of lateral epicondylitis

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Keywords: Radial shock wave therapy; Lateral epicondylitis

Introduction.— Lateral epicondylitis is one of the most common overuse syndromes. There are different treatment modalities and their effectiveness is rather controversial.

Aim.— Evaluate the effect of radial shock wave therapy in lateral epicondylitis. **Material and methods.**— Treat with one session per week for 5 weeks patients with lateral epicondylitis. A session consisted of 2500 shocks at 2 bars. Frequency was 5 Hz and 10 Hz for the last 500 shocks. Pain was evaluated before treatment, at 3, 6 and 12 months after treatment at rest, at palpation and during Thomsen's test (VAS) and the Patient-Rated Tennis Elbow Evaluation (PRTEE) questionnaire were performed.

Results.— Sixteen patients, mean age 47.2 ± 2.3 years 15.6 ± 4.6 lasting for months were included in the study.

VAS values were:

– at rest from 3.75 ± 0.49 before therapy to 1.94 ± 0.46 at 3 months and 0.69 ± 0.38 at 1 year;

– at palpation from 7.44 ± 0.38 before therapy to 3.56 ± 0.40 at 3 months and 1.46 ± 0.56 at 1 year;

– at Thomsen test from 5.87 ± 0.46 before therapy to 2.5 ± 0.40 at 3 months and 1 ± 0.38 at 1 year.

PRTEE showed significant reduction of pain and functional improvement. The total score improved from 56.75 ± 2.34 before therapy to 27.53 ± 3.7 at 3 months and 13.69 ± 4.48 at 1 year.

Discussion/Conclusion.— Radial shock wave therapy can be recommended as second line treatment in lateral epicondylitis evolving for more than 6 months when other conservative treatments have failed.

Further reading

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P009-e

Gait analysis: An objective measurement for subgrouping fibromyalgia patients

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Keywords: Fibromyalgia; Gait analysis; Subgrouping

Background.— Fibromyalgia (FM) is a heterogeneous syndrome and its classification into subgroups calls for broad-based discussion. FM subgrouping, which aims to adapt treatment according to different subgroups, relies in part, on psychological and cognitive dysfunctions. Since motor control of gait is closely related to cognitive function, we hypothesized that gait markers could be of interest in the identification of FM patients' subgroups. This controlled study aimed at characterizing gait disorders in FM, and subgrouping FM patients according to gait markers such as stride frequency (SF), stride regularity (SR), and cranio-caudal power (CCP) which measures kinesia.

Methods.— A multicentre, observational open trial enrolled patients with primary FM (44.1 ± 8.1 years), and matched controls (44.1 ± 7.3 years). Outcome measurements and gait analyses were available for 52 pairs. A 3-step statistical analysis was carried out. A preliminary single blind analysis using k-means cluster was performed as an initial validation of gait markers. Then in order to quantify FM patients according to psychometric and gait variables an open descriptive analysis comparing patients and controls were made, and correlations between gait variables and main outcomes were calculated. Finally using cluster analysis, we described subgroups for each gait variable and looked for significant differences in self-reported assessments.

Results.— SF was the most discriminating gait variable (73% of patients and controls). SF, SR, and CCP were different between patients and controls. There was a non-significant association between SF, FIQ and physical components from Short-Form 36 ($P = 0.06$). SR was correlated to FIQ ($P = 0.01$) and catastrophizing ($P = 0.05$) while CCP was correlated to pain ($P = 0.01$). The SF cluster identified three subgroups with a particular one characterized by normal SF, low pain, high activity and hyperkinesia. The SR cluster identified two distinct subgroups: the one with a reduced SR was distinguished by high FIQ, poor coping and altered affective status.

Conclusion.— Gait analysis may provide additional information in the identification of subgroups among fibromyalgia patients. Gait analysis provided relevant information about physical and cognitive status, and pain behavior. Further studies are needed to better understand gait analysis implications in FM.

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